# 2019-09-23-25 ONS at Antwerp, Belgium Policy Framework Demonstration

## Policy goes mainstream, leveraging TOSCA and Kubernetes to build & deploy network policies

The architecture and the implementation of the ONAP Policy Framework was substantially upgraded in the ONAP Dublin release.

In this demo, we present the evolved ONAP Policy Framework discussing the most important improvements and describing the evolved Policy Framework architecture.

The framework is generic, extendable, scalable and can be used in ONAP or standalone outside ONAP.

We highlight the power of TOSCA Policy Types (configuration templates) and how they can be used to build translation applications (setting up closed loop policies).

We will also present the new components of Policy frame work using a Kubernetes deployment of ONAP.

And then finally show a demo of creating & deploying policy in a pdp engine using the new architecture.

#### Policy Architecture

https://onap.readthedocs.io/en/latest/submodules/policy/parent.git/docs/architecture/architecture.html # architecture/ar

#### Policy Design

https://onap.readthedocs.io/en/latest/submodules/policy/parent.git/docs/design/design.html#introduction

Examples of Tosca Policy Types

https://github.com/onap/policy-models/tree/master/models-examples/src/main/resources

#### Demo OOM Installation of Policy Framework Components



#### Postman collection used in the demo



Building Policy Applications for various PDP Engines

**Apex PDP Applications Drools PDP Applications XACML PDP Applications** 

Demo of API's

**Policy Type and Policy CRUD API PDP Group API Policy Deployment API Decision API** 

## Future Roadmap

- Finishing upgrade of other ONAP clients supporting the new policy design, api's and framework.
  - OOF for placement
  - o SO for scaling
  - SDNC for naming policies
- Monitoring better ability to monitor the running policies and PDP's.
  Policy Update Notification updates to client applications when policies are created, updated, or deleted.
- Support for raw policies support for raw PDP engine policies.
  Policy Distribution to support automated policy creation via service distribution from SDC.

### **Background of Booth Presenters**

Ajith Sreekumar

Liam Fallon

Pamela Dragosh

Ram Krishna Verma - Actively contributing in ONAP Policy Framework since Beijing release. Also, a committer in the project since Dublin release.

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